

WHAT IS CLAIMED IS

5

1. A capacitor, comprising:
a capacitor part comprising a dielectric
film sandwiched by a pair of electrodes; and
a support body of a film of an organic
10 polysilane, said support body supporting said
capacitor part thereon.

15

2. The capacitor as claimed in claim 1,
further comprising an insulation layer covering said
capacitor part.

20

3. A method of manufacturing a capacitor
including a capacitor part in which a dielectric film
25 is sandwiched by a pair of electrodes and a support
body of an organic polysilane film supporting said
capacitor part, comprising the steps of:

forming a layer of organic polysilane on a
surface of a base material;
30 forming a first electrode on said layer of
organic polysilane;
forming a dielectric film on said first
electrode;

forming a second electrode on said dielectric film;

forming an insulation layer on said layer of organic polysilane and on said second electrode;

5 said layer of organic polysilane, said first electrode, said dielectric film, said second electrode and said insulation layer forming a layered body on said base material,

10 forming a groove in said layer of organic silane and said insulation layer for dividing said layered body into individual capacitors; and
removing said base material.

15

4. The method as claimed in claim 3, wherein said step of removing said base material is conducted in the state that a tape is attached to a top surface 20 of said insulation layer so as to bridge said groove.

25 5. substrate for mounting a semiconductor chip thereon, comprising:

 a substrate body defined by upper and bottom surfaces;

30 a plurality of terminals provided on said top surface for connection with a semiconductor chip mounted on said top surface, said top surface thereby forming a chip-mounting surface;

 a plurality of terminals provided on said

bottom surface for external connection, said bottom surface thereby forming a mounting surface; and

a capacitor embedded in said substrate body right underneath said chip-mounting surface,

5 said capacitor comprising:

a capacitor part including a dielectric film sandwiched by a pair of electrodes; and

10 a support body of an organic polysilane film supporting said capacitor part.

10

6. A method of manufacturing a substrate for
15 mounting a semiconductor chip, said substrate having a
mounting surface carrying thereon terminals for
external connection at a lower principal surface and a
chip-mounting surface for carrying a semiconductor
chip at an upper principal surface, said substrate
20 further including a capacitor embedded right
underneath said chip-mounting surface such that said
capacitor includes a capacitor part formed of a
dielectric film sandwiched by a pair of electrodes and
a support body of an organic polysilane film
25 supporting said capacitor part, said capacitor having
an insulation film covering said capacitor part,

 said method comprising the steps of:

 bonding said capacitor on a base;

 forming an insulation layer on said base

30 such that said insulation layer covers said capacitor;
 laminating a plurality of insulation layers
on said base so as to cover said capacitor; and
 removing said base.

7. A semiconductor device, comprising:

a substrate; and

a semiconductor chip mounted on said substrate,

5 said substrate comprising:

a substrate body defined by upper and bottom surfaces;

 a plurality of terminals provided on said top surface for connection with said semiconductor

10 chip mounted on said top surface, said top surface thereby forming a chip-mounting surface;

 a plurality of terminals provided on said bottom surface for external connection, said bottom surface thereby forming a mounting surface; and

15 a capacitor embedded in said substrate body right underneath said chip-mounting surface,

 said capacitor comprising:

 a capacitor part including a dielectric film sandwiched by a pair of electrodes; and

20 a support body of an organic polysilane film supporting said capacitor part.